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No. 92-1012

IN THE
Supreme Court of the United States
OCTOBER TERM, 1992

SIMPSON PAPER (VERMONT) COMPANY,
Petitioner
v.
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
and SIERRA CLUB

On Petition for a Writ of Certiorari to the Supreme Court of the State of Vermont

REPLY BRIEF FOR PETITIONER

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REPLY BRIEF FOR PETITIONER

The questions presented by Simpson in its Petition concern the scope of state authority under a federal statute, § 401 of the Clean Water Act, 33 U.S.C. § 1341 (1988) ("CWA"). Simpson contended in the Supreme Court of Vermont that the aesthetics of a cascading dam were not relevant to Vermont's authority to condition water quality certificates issued under § 401 (Br. Op. App. 11a, 58a-62a). The State Supreme Court expressly decided this federal question adversely to petitioner (Pet. App. 3a-4a).

1. Respondents' contention (Br. Op. 6-8) that the holding of the Vermont Supreme Court was based upon an adequate alternative state ground—that the water quality certificate's spillage condition was necessary to correct a downstream dissolved oxygen ("DO") deficiency—is incorrect. In affirming the judgment of the Vermont Su-

perior Court, the State Supreme Court did not address the DO issue.

The Vermont Supreme Court's decision has two analytical parts. The first part discusses and rejects Simpson's request for an alternative remedy—a remand either to the lower court or to the Vermont Department of Environmental Conservation ("DEC") for the purpose of adducing more facts on the DO issue[1] (Pet. App. 1a-4a). The second part sustains the authority of Vermont's certifying agency to consider aesthetics and recreational factors under § 401 and the adequacy of the evidence to support the spillage requirement under this standard. The entirety of the second part is in one paragraph:

> Plaintiffs lastly contend that the spillage requirement was not supported by the evidence and that it was beyond the DEC's authority under federal law to consider aesthetic and recreational factors as grounds for a spillage requirement. The Clean Water Act allows the state to impose conditions in a § 401 certification to ensure applicant's compliance with certain criteria, including "any other appropriate requirement of State law." 33 U.S.C. § 1341 (d). Vermont's water quality standards promulgated in accordance with this Act require that the Connecticut River be managed for "water of a quality which consistently exhibits good aesthetic value . . . and recreation." Vermont Water Quality Standards § 3-03. The DEC spillage requirement was amply supported by the evidence. Not only were aesthetics and recreation considered relevant, ease of administration and monitoring were fostered by the requirement. See *In re Sherburne*, 154 Vt. 596, 607, 581 A.2d 274, 280

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[1] At the outset of its opinion, the Vermont Supreme Court summarized its decision:

> [Plaintiffs] seek to set aside continuous spillage conditions in a § 401 water quality certification, or, *alternatively*, seek a remand to the DEC for consideration of additional evidence, or a remand to superior court for de novo review. We affirm. (emphasis added) (Pet. App. 1a).

(1990) (added deference afforded agency determinations in highly technical fields). (Pet. App. 3a-4a).

From the foregoing, it is clear that the court never expressly addressed the DO issue, even though Simpson vigorously argued the question (Br. Op. App. 44a-49a). Respondents highlight the court's statement that the "spillage requirement was amply supported by the evidence" (Pet. App. 3a). That statement, however, is immediately preceded by the court's conclusion that § 401(d) authorizes aesthetic and recreational conditions. The court then concludes that the evidence is sufficient because it has held, erroneously, that aesthetics and recreation are relevant criteria under § 401. The context also shows that the phrase "ease of administration and monitoring were fostered" refers to aesthetics and recreation, not the DO issue the court was invited to decide. The absence of any statement concerning the DO issue creates a conclusive presumption that the State Supreme Court decided the case on the specific federal grounds it discussed. *Coleman v. Thompson*, —— U.S. ——, 111 S. Ct. 2546, 2556-58 (1991).[2]

2. Respondents are mistaken in contending that the reference to preserving "good aesthetic value . . . and recreation" found in the "management objectives" of the Vermont Water Quality Standards ("WQS") (App. 16a) provides an "other appropriate requirement of State law" under § 401(d) (Br. Op. 9-14). This contention reflects a fundamental misunderstanding of the federal-state relationship created by § 303 of the CWA (33 U.S.C. § 1313 (1988)) and implemented in federally-approved state

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[2] To establish an alternative independent state law holding, the state decision must "indicate[] clearly and expressly that it is alternatively based on bona fide separate, adequate, and independent grounds. . . ." *Michigan v. Long*, 463 U.S. 1032, 1041 (1983). This "'plain statement' rule" is one of broad application, such that it applies "regardless of whether the disputed state-law ground is substantive . . . or procedural. . . ." *Harris v. Reed*, 489 U.S. 255, 261 (1989) (citations omitted).

Water Quality Standards mandated by the CWA.[3] Pursuant to § 510 of the CWA (33 U.S.C. § 1370 (1988)) a state may adopt "other appropriate requirement[s] of State law" under § 401(d) more stringent than federal standards. It may not, however, require water quality standards that are incompatible with those established under the Act. *Cf. International Paper Co. v. Ouellette*, 479 U.S. 481, 497 (1987).

Vermont's WQS were promulgated pursuant to § 303 and were approved thereunder by the Environmental Protection Agency ("EPA") (Pet. 24; Br. Op. 11, n.7). Thus, the standards, as approved, can only be construed within the confines of CWA § 303.

EPA's regulations governing approval of state WQS under CWA § 303 impose a three-part framework on state standards. First, each state is to designate certain uses of each water body. 40 C.F.R. §§ 131.2, 131.6(a), 131.10 (1992). Second, each "designated use" is to be "protected" through adoption of one or more criteria. 40 C.F.R. §§ 131.2, 131.3(b), 131.6(c), 131.11(a) (1992). Although these criteria may be either numeric or narrative, in both formats they must be based on a "sound scientific rationale." 40 C.F.R. § 131.11 (1992).[4]

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[3] Section 303 is reproduced at Pet. App. 57a-66a.

[4] EPA's regulations pertaining to criteria are codified at 40 C.F.R. § 131.11. The preamble explains, *inter alia*, that "[s]uch criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use." 48 Fed. Reg. 51400 at 51402 (1983). Thus, a state may adopt in its WQS any water quality criteria which EPA proposes or "any other criteria for which they have sound scientific support." 48 Fed. Reg. 51400 at 51411 (1983). An EPA handbook elaborates:

> The criteria which are adopted may be numerical or narrative or both. Pollutant-specific numerical criteria may be used when the control of specific pollutants is of concern, and narrative criteria may be applied when the control of either combinations

In other words, criteria must have a basis in objective fact. Subjective aesthetic criteria are plainly incompatible with this requirement. Third, the state's WQS must prevent degradation of existing water quality levels.

Respondents improperly incorporate "designated uses" into "criteria," which are the operative water quality factors dischargers must satisfy. "Designated uses," however, are simply the objectives the state seeks to protect through its water quality criteria. 40 C.F.R. §§ 131.2, 131.6(c). Vermont's WQS define general water quality criteria for all of the state's waters (App. 13a), and specific water quality criteria for the Class B waters in question here (App. 16a). Nowhere in Vermont's criteria, as distinguished from its identification of "designated uses," [5] do the words "aesthetics" or "recreation" appear (App. 13a-16a). EPA's requirements are based on the scheme of the CWA. Under those requirements, scenic aesthetics cannot be included in state criteria because such a standard would have no scientific foundation, and would not relate to water quality.

Indeed, criteria based on scenic aesthetic standards would be amorphous, reflecting only the current aesthetic values of state officials.[6] Such criteria would be incom-

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of pollutants together or individual pollutants not contained in state water quality standards is of concern.

EPA Water Quality Standards Handbook, p. 2-17 (December 1983). *See also* 40 C.F.R. 131.6(f) (1992).

[5] In its WQS, Vermont styles designated uses as "management objectives." (App. 16a; Br. Op. 4, n.6).

[6] According to the American Heritage Dictionary (Second College Ed. 1982), "aesthetic" is defined as:

> **aesthetic** or **esthetic** . . . adj. **1.** Of or pertaining to the criticism of taste. **2. a.** Of or pertaining to the sense of the beautiful: *the aesthetic faculties.* **b.** Artistic: *an aesthetic success.* **3. a.** Having a love of beauty. **b.** *Informal.* In accordance with accepted notions of good taste.

[Continued]

patible with the "clear and identifiable" standards Congress intended to establish in the CWA, because they would vary from time to time according to subjective taste, and thus would be inherently vague and indeterminate. *Cf. International Paper Co. v. Ouellette*, 481 U.S. at 496.

Respondents' conflation of "criteria" and "designated uses" also explains their mistaken conclusion that nonquantitative factors are "appropriate requirement[s] of State law" under § 401(d). Compatibility with the design and purposes of the 1972 amendments to the CWA mandates that such requirements have a scientific basis. This necessarily implies a quantitative foundation, or a reasonable approximation in narrative form. No scientifically based numeric or narrative criteria in the Vermont WQS were invoked in support of the scenic aesthetic standard challenged here.

3. Respondents' argument that there is no conflict among state courts concerning the enforceability of "designated uses" under CWA § 401(d) (Br. Op. 14-17) is a disingenuous attempt to avoid the question presented by the petition. Respondents' assertions rest on their wholly erroneous view that designated uses may function as enforceable criteria. Not only does the decision of the Vermont Supreme Court conflict with the cases enumerated in the petition (Pet. 19-20), but it also conflicts with the latest New York decision. That State's Appellate Divi-

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[6] [Continued]

Where, as here, one is concerned with preserving a scientific, measurable standard, the definition of "aesthetics" is equally revealing:

> **aesthetics** or **esthetics** . . . n. (*used with a sing. verb*). **1.** The branch of philosophy that provides a theory of the beautiful and of the fine arts. **2.** The theories and descriptions of the psychological response to beauty and artistic experiences. **3.** In the philosophy of Kant, the branch of metaphysics concerned with the laws of perception.

sion has ruled that "any other appropriate requirement of State law" under § 401(d) of the CWA does not include every state provision that indirectly protects water quality in any manner. Environmental requirements not related to water quality, *i.e.*, beyond narrative and numerical criteria required by EPA, are "reserved by the FPA for determination at the Federal level—dam safety, general balancing of economic and other concerns, the effect on wildlife, recreational opportunities and the like." *Niagara Mohawk Power Corp. v. New York Dep't. of Envtl. Conservation*, No. 65306, 1993 WL 2586, slip op. at 3 (N.Y. App. Div. Jan. 7, 1993).

Respondents' discussion of *Arnold Irrigation District v. Department of Environmental Quality*, 717 P.2d 1274, *review denied*, 726 P.2d 377 (Or. Ct. App. 1986), is incomplete. That case held that a violation of the provisions of the CWA expressly enumerated in § 401 "is the only basis on which the state has authority under the CWA to deny the certificate. The power to issue the certificate is solely a creature of federal law; the state agencies are controlled by that law in their decisions on applications." 717 P.2d at 1278. Because the certificate application had been denied for failure to comply with state and county land use requirements, the Oregon Appellate Court remanded the application to the state certifying agency for reconsideration. In dictum, the court also suggested that land use regulations might bear on water quality conditions under § 401(d) to the extent not superseded by federal law. It therefore directed the state agency to examine the specific relationship of such provisions to water quality. 717 P.2d at 1279. Significantly, the court ruled that § 401(d) "does not, however, allow limitations which are not related to water quality." *Id.*

Respondents also misread *Bangor Hydro Electric Co. v. Board of Environmental Protection*, 595 A.2d 438 (Me. 1991). That case held that a state certifying agency may require an applicant for a § 401 certificate to produce

information relating to the state's designated uses. The Maine Supreme Court carefully ruled, however, that "[w]e need not decide in this appeal to what extent the Board may condition water quality certification upon measures designed to promote the future attainment of designated uses," because that issue was not before the court. 595 A.2d at 443.

Simpson has emphasized the conflict among the states concerning the scope of § 401 because that conflict is causing enormous delay and expense in the relicensing of nearly 200 existing hydro-electric projects and the development of future projects. The conflict should be resolved promptly.

4. Respondents' contention that Simpson's petition raises issues not adequately preserved in the Vermont Supreme Court (Br. Op. 18-23) is mistaken. They fail to recognize the proper scope of the federal questions actually presented.[7]

Respondents cannot deny that the State Supreme Court decided, contrary to Simpson's arguments (Br. Op. App. 11a, 58a-62a), that applicable federal law authorizes a spillage requirement based on aesthetics and recreation. It is simply indisputable that the construction of a federal statute like § 401 of the CWA, and, indeed all interstate water issues generally, are matters of federal law. *Arkansas v. Oklahoma*, —— U.S. ——, 112 S. Ct. 1046, 1052-54 (1992); *International Paper Co. v. Ouellette*, 479 U.S. 481, 490 (1987).[8]

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[7] Respondents miss the mark in contending (Br. Op. 19-20) that Simpson did not preserve the question whether spillage over a dam is a discharge under the CWA. That issue was not litigated and the petition disavows presenting it (Pet. 23, n.51).

[8] Respondent Sierra Club argued in the Vermont Superior Court:

> [Simpson's predecessor] is conceding that the question in this case is whether the continuous spill requirement is necessary to meet the water quality standards. Well, that necessarily involves federal issues as to what is included in a water quality standard. (Tr. January 16, 1991, p. 34, lines 19-23).

The § 401 issue here arises in the context of Simpson's application for relicensing of its hydroelectric facility under Part I of the Federal Power Act ("FPA"). 16 U.S.C. §§ 791-823 (1988). In its petition Simpson has further developed the § 401 issue by explaining the implications of the Vermont Supreme Court's decision. That decision has the direct consequence of extending the state's permitting functions beyond the confines of § 401 of the CWA into hydroelectric licensing responsibilities reserved to the Federal Energy Regulatory Commission ("FERC") under the FPA.

In its brief to the Vermont Supreme Court, Simpson specifically adverted to FERC's approval of cases that have rejected other states' attempts to go beyond § 401, which focuses only on water quality issues (Br. Op. App. 60a-61a). In supporting that argument Simpson cited a number of cases specifically discussing FERC's role under the FPA: *Fourth Branch Assoc. v. Dep't. of Envtl. Conservation*, 550 N.Y.S. 2d 769, 146 Misc.2d 334 (N.Y. Sup. Ct., Albany Co. 1989); *In re Long Lake Energy Corp. v. New York Dep't. of Envtl. Conservation*, 164 A.D.2d 396, 563 N.Y.S.2d 871 (N.Y. App. Div. 1990); and *Pennsylvania v. City of Harrisburg*, 133 Pa. Commw. 577, 578 A.2d 563 (Pa. Commw. Ct. 1990).

Simpson's argument concerning the interrelationship between the FPA's hydroelectric licensing scheme and state water quality certification under the CWA is properly contained within the federal issue decided below—the scope of state conditioning authority under § 401. Respondents themselves recognize that Simpson's request for water quality certification from the Vermont DEC was part of the relicensing process for the Gilman Hydroelectric Facility which Simpson is pursuing at the FERC (Br. Op. 3). As this Court has held, "[o]nce a federal claim is properly presented, a party can make any argument in support of that claim; parties are not limited to

the precise arguments they made below." *Yee v. City of Escondido*, —— U.S. ——, 112 S. Ct. 1522, 1532 (1992).

CONCLUSION

For the reasons stated in the Petition for a Writ of Certiorari and this reply brief, the Petition for a Writ of Certiorari should be granted.

Respectfully submitted,

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February 22, 1993

APPENDIX

APPENDIX

EXCERPTS FROM
VERMONT WATER QUALITY STANDARDS
EFFECTIVE JANUARY 8, 1987

STATE OF VERMONT
WATER RESOURCES BOARD
Montpelier, Vermont 05602
(802) 828-2871

* * * *

Chapter 1 GENERAL POLICY

Section 1-01. Applicability and Definitions

A. *Applicability*

These Water Quality Standards shall apply to all permit applications including applications for the renewal of permits for existing discharges, which are filed on or after the date upon which the amended standards become effective and to all activities which occur after that date. The Water Quality Standards effective since January 7, 1985 shall apply to all permit applications which are filed before the effective date of these rules.

B. *Definitions*

For the purposes of these Water Quality Standards, the terms below shall have the following meanings unless a different meaning clearly appears from the context.

1. *Accepted agricultural or silvicultural practices* means those practices as defined by the commissioners of agriculture and forests, parks and recreation respectively in accordance with 10 V.S.A. § 1259(f) as being necessary to protect water quality in a manner consistent with the Act.

2. *Act* means the "Vermont Water Pollution Control Act," 10 V.S.A., Chapter 47.

3. *Applicable water quality criteria* means all criteria specified in sections 3-01, 3-05, 3-06 as well as those specified in sections 3-02(B), 3-03(B) and 3-04(B) which are applicable to the classification of the waters in question.

4. *Assimilative capacity* means a measure of the capacity of the receiving waters to assimilate wastes without lowering their quality below the applicable water quality criteria.

5. *Background conditions* means conditions which exist in the absence of human or cultural influences which are not subject to regulation under the Act.

6. *Beneficial values or uses* means any value or use, whether existing or not, which is specified in the management objectives for each class of water as set forth in sections 3-02(A), 3-03(A) and 3-04(A) of these rules.

7. *Board* means the Vermont Water Resources Board, 10 V.S.A. § 1251(1).

8. *Classification* means the water quality classification designated for a specific body of water in accordance with the provisions of 10 V.S.A. § 1253.

9. *Discharge* means the placing, depositing, or emission of any wastes, directly or indirectly, into an injection well or into the waters of the state, 10 V.S.A. § 1251(2).

10. *EPA* means the U.S. Environmental Protection Agency.

11. *Existing discharge* means any discharge to the extent authorized by a valid permit issued under the provisions of 10 V.S.A. § 1263 or § 1265 as of January 7, 1985.

12. *Existing Use* means any beneficial use of water which provides important economic, social or other public benefits and which has occurred on a frequent, regular or consistent basis and any other use made of the water which is compatible with its classification.

13. *Groundwater* means water below the land surface, 10 V.S.A. § 1410 (b)(1).

14. *Indirect discharge* means any discharge to groundwater, whether subsurface, land-based or otherwise, 10 V.S.A. § 1251(15).

15. *Mixing zone* means a length or area within the waters of the state required for the dispersion and dilution of waste discharges adequately treated to meet federal and state treatment requirements and within which it is recognized that specific water uses or water quality criteria associated with the assigned classification for such waters may not be realized. The mixing zone shall not extend more than 200 feet from the point of discharge, 10 V.S.A. § 1251(6).

16. *New discharge* means any discharge not authorized under the provisions of 10 V.S.A. § 1263 as of January 7, 1985 or any increased pollutant loading or demand on the assimilative capacity of the receiving waters from an existing discharge which requires the issuance of a new or amended permit.

17. *Nonpoint source waste* means waste which reaches the waters of the state via direct or indirect discharge in a diffuse manner from sources including, but not limited to, overland runoff from construction sites, or as a result of agricultural or silvicultural practices.

18. *Nonpolluting waste* means those wastes which prior to treatment do not have the potential to result in an undue adverse effect on any existing use, beneficial value or use, or the quality of the receiving waters.

19. *Permit* means a Discharge Permit issued in accordance with the provisions of 10 V.S.A. § 1263.

20. *Person* means an individual, partnership, public or private corporation, municipality, institution, or agency of the state or federal government, including any officer or governing or managing body of a partnership, association, firm or corporation, 10 V.S.A. § 1251(8).

21. *Public Interest* means that which shall be for the greatest benefit to the people of the state as determined by the Board in accordance with the criteria set forth in subsection (e) of section 1253 of the Act.

22. *Publicly owned treatment works (POTW)* means any government owned device or system used in the storage, treatment, disposal or recycling of wastes.

23. *Receiving waters* means all waters adjacent to a discharge and all adjacent or downstream waters whose quality may be affected by that discharge.

24. *Seven Day Low Flow, Ten Year Return Period (7Q10)* means that instantaneous flow which is equal to the lowest mean flow for seven consecutive days which has a 10% chance of occurring in any given year.

25. *Secretary* means the Secretary of the Agency of Environmental Conservation or his authorized representative, 10 V.S.A. § 1251(11).

26. *Stormwater runoff* means natural precipitation which does not infiltrate into the soil, including any material dissolved or suspended in such water. Stormwater runoff does not include wastes from combined sewer overflows.

27. *Toxic wastes* means those wastes or combinations of wastes which, after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of available information cause death, disease, behaviorial abnormalities, cancer, genetic mutations, physiological or reproductive malfunctions or physical deformations in such organisms or their offspring.

28. *Undue Adverse Effect*—This phrase shall have its common meaning. In determining undue adverse effect, the Secretary is authorized to make case specific judgments in applying these rules. In making such judgments, the water quality policy set forth in section 1-02, the classification of the waters and any other applicable provisions of these rules shall be considered. Except where the context clearly indicates otherwise, applications or interpretations which are less stringent than the specific provisions of these rules shall not be allowed.

29. *Waste* means effluent, sewage, or any substance or material, liquid, gaseous, solid or radioactive, including heated liquids, whether or not harmful or deleterious to waters, 10 V.S.A. § 1251(12).

30. *Waters* and *Waters of the State* means any river, stream, creek, brook, reservoir, pond, lake, spring, and any body of surface water, artificial or natural, which is contained within, flows through or borders upon the State of Vermont or any portion thereof, 10 V.S.A. § 1251(13).

Section 1-02. General Water Quality Policy (10 V.S.A. § 1250)

It is the policy of the state of Vermont to:

(1) protect and enhance the quality, character and usefulness of its surface waters and to assure the public health;

(2) maintain the purity of drinking water;

(3) control the discharge of wastes to the waters of the state, prevent degradation of high quality waters and prevent, abate or control all activities harmful to water quality;

(4) assure the maintenance of water quality necessary to sustain existing aquatic communities;

(5) provide clear, consistent and enforceable standards for the permitting and management of discharges;

(6) protect from risk and preserve in their natural state certain high quality waters including fragile high-altitude waters, and the ecosystems they sustain;

(7) manage the waters of the state to promote a healthy and prosperous agricultural community, to increase the opportunities for use of the state's forest, parks and recreational facilities, and to allow beneficial and environmentally sound development.

It is further the policy of the state to seek over the long term to upgrade the quality of waters and to reduce existing risks to water quality.

Section 1-03. Anti-Degradation Policy

A. *General Policy*

The Board shall establish water quality classifications in accordance with the statutory provisions of the Act and in a manner consistent with Sections 1-02 and 1-03 of these rules. To the greatest extent possible the classification of the waters shall identify existing uses, background conditions, and the degree of water quality to be obtained and maintained. Existing water quality classifications shall be maintained unless the Board, after a public hearing, finds that

they are contrary to the public interest except as provided for in 10 V.S.A. § 1253(f).

Those waters whose quality meets or exceeds the water quality criteria specified in sections 3-01, 3-03, 3-05 and 3-06 of these rules and which quality makes an important contribution to the propagation or survival of any beneficial species of aquatic biota at any period in their life history within any of the 17 planning basins identified in Chapter 4 of these rules, constitute high quality waters which have significant ecological value and therefore are eligible for reclassification to Class A in accordance with the provisions of 10 V.S.A. § 1253(c) and § 1253(f).

The aquatic biota shall be considered to have been significantly altered whenever a discharge or combination of discharges results in a change in the number or diversity of aquatic biota that exceeds the range of natural variation within the receiving waters where such a change results in a measurable alteration of the essential biological characteristics of the receiving waters. The natural variation of aquatic biota shall be determined by sampling and statistical protocols established by the Secretary as provided for in section 2-01(f) of these rules.

The Secretary shall manage the waters of the State in accordance with the Water Quality Standards to protect, maintain and improve water quality in such a manner that the beneficial values and uses associated with their classification are attained.

In those waters where background conditions result in an in-stream level of water quality below any applicable water quality criterion, compliance with the in-stream condition may be allowed when specifically authorized by the terms of a permit, provided that the quality of the receiving waters is not reduced. All other waters, except mixing zones, shall be managed

so that, at a minimum, a level of water quality compatible with all beneficial values and uses associated with the assigned classification are obtained and maintained.

Existing instream uses and the level of water quality necessary to protect those existing uses shall be maintained and protected.

B. *Protection of High Quality Waters*

For all waters where the existing quality generally exceeds one or more of the following applicable water quality criteria: dissolved oxygen, fecal coliform, color or turbidity, that high quality shall be maintained and protected in the public interest to the fullest extent possible.

1. Consistent with the requirements set forth in subsection B(2) below, a limited reduction in the higher quality of such waters may be allowed only when it is shown that:

   (a) The adverse economic or social impacts on the people of the state specifically resulting from the maintenance of the higher quality of the waters are substantial and widespread, and

   (b) Are not warranted by the economic, social and other benefits to the people of the state resulting from the maintenance of such a higher level of water quality.

2. Any decision to allow a limited reduction in high quality waters shall be consistent with the following requirements:

   (a) Only that degree of reduction in the higher quality waters which is necessary to comply with the above criteria, shall be allowed, and

(b) That degree of water quality which is necessary to maintain and protect all existing uses as well as all applicable water quality criteria of the receiving waters shall be maintained.

C. *Protection of Outstanding Resource Waters*

The Board may by rule designate certain waters as Outstanding Resource Waters. Outstanding resource waters are those Class A or B waters which constitute an exceptional state or national resource or which have exceptional recreational or ecological significance. The existing high quality of waters so designated by the Board shall be protected and maintained.

Section 1-04. Discharge Policy

A. *Discharge Criteria*

In addition to the other provisions of these rules, new discharges of wastes may be allowed only when all the following criteria are met:

1. The proposed discharge is in conformance with all applicable provisions of these rules including the classification of the receiving waters adopted by the Board as set forth in Chapter 4 of these rules.

2. There is no alternative method of, or location for, waste disposal which would have a lesser impact on water quality including the quality of groundwater, or if there is such an alternative method or location, it would be clearly unreasonable to require its use.

3. The design and operation of any waste treatment or disposal facility is adequate and sufficiently reliable to protect all beneficial values

and uses and to insure compliance with these rules and with all applicable state and federal treatment requirements and effluent limitations.

4. Except as provided for in 10 V.S.A. § 1259(d) and (f), the discharge of wastes other than non-polluting wastes and stormwater runoff is prohibited in Class A waters regardless of the degree of treatment provided.

5. Except as provided for in 10 V.S.A. § 1259(d), (e) and (f), the discharge of wastes that, prior to treatment, contained organisms pathogenic to human beings into Class A or Class B waters is prohibited.

6. The receiving waters will have sufficient assimilative capacity to accommodate the proposed discharge.

7. Assimilative capacity has been allocated to the proposed discharge consistent with the classification in Chapter 4 of these rules and the priorities established in subsection B below.

8. The withdrawal of water from, or the discharge of wastes to the thermocline or hypolimnion of any lake in a manner that may result in an undue adverse effect on any existing use or on any beneficial value or use is prohibited.

9. The indirect discharge of sewage into Class B waters will not pose more than a negligible risk to public health. Compliance with this criterion shall include an assessment of both the level and reliability of treatment achieved and the impact of the discharge on the water quality of the receiving waters.

B. *Assimilative Capacity Priorities*

The capacity of the waters of the State to assimilate both the discharge of wastes and the impact of other activities which may adversely affect water quality, and at the same time to be maintained at a level of water quality which is compatible with their classification, is finite. A portion of the assimilative capacity may be held in reserve to provide for future needs, including the abatement of future sources of pollution and future social and economic development.

Accordingly, the assimilative capacity of the waters of the State shall be carefully allocated in accordance with both the priority rankings established below and, when applicable, the "Wasteload Allocation Process" as adopted by the Secretary, to accommodate the following:

1. Existing discharges from publicly owed treatment works (POTW) treating existing sources of waste.
2. Existing discharges from privately owned treatment works treating existing sources of waste.
3. Increased or new discharges from POTW which are attributable to the treatment of existing sources of pollution from existing development.
4. New discharges from existing development which have become a source of pollution.
5. New discharges from POTW treating sources of waste from new development which is within the area served by the treatment facility and which occurs at a rate associated with the normal incremental growth of the area.
6. New discharges from POTW treating new sources of waste from new development which is not within the area served by the treatment facility

but which occurs at a rate associated with the normal incremental growth of the area.

7. New discharges from public or privately owned treatment works treating new sources of waste from new development which occurs at a rate not associated with the normal incremental growth of the area.

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Chapter 3 DETERMINATION OF CRITERIA

Section 3-01 Water Quality Criteria—General

The following water quality criteria shall apply to all waters, except mixing zones, regardless of their classification:

1. *Dissolved Oxygen*

   a. *Cold Water Fish Habitat*—Not less than 7 mg/l or 75 percent saturation at all times, nor less than 95 percent saturation during late egg maturation and larval development of salmonids in areas which the Secretary determines are salmonid spawning or nursery areas important to the establishment or maintenance of the fishery resource. Not less than 6 mg/l or 70 percent saturation at all times in all other waters designated as a cold water fish habitat.

   b. *Warm Water Fish Habitat*—Not less than 5 mg/l or 60 percent saturation at all times.

2. *Temperature*

   a. *General*

      The change or rate of change in temperature, either upward or downward, shall be controlled so as to prevent any undue adverse effect on aquatic biota, fish and wildlife.

b. *Cold Water Fish Habitat*

The total increase in temperature from background conditions due to all discharges and activities shall not at any time exceed 1.0°F except as provided for in paragraph (d) below.

c. *Warm Water Fish Habitat*

The total increase in temperature from background conditions due to all discharges and activities shall not at any time exceed the values derived from tables 1 or 2 except as provided for in paragraph (d) below.

Table 1. Rivers, Streams, Brooks and Creeks

Background temperature	*Total allowable increase above background temperature*
Above 66°F.	1°F.
63° to 66°F.	2°F.
59° to 62°F.	3°F.
55° to 58°F.	4°F.
Below 55°F.	5°F.

Table 2. Lakes, Ponds, Reservoirs and other waters

Background temperature	*Total allowable increase above background temperature*
Above 60°F.	1°F
50°F—60°F.	2°F
Below 50°F.	3°F

d. *Assimilation of Thermal Wastes*

The Secretary may, by permit condition, specify temperature criteria which exceed the values spec-

ified above in order to authorize discharges of thermal wastes when it is shown that:

(1) The discharge will comply with all other applicable provisions of these rules.

(2) A mixing zone of 200 feet in length is not adequate to provide for assimilation of the thermal waste.

(3) After taking into account the interaction of thermal effects and other wastes, that the higher temperature will not result in thermal shock or have an undue adverse effect on aquatic biota, fish or wildlife or any beneficial values or uses associated with the classification of the receiving waters.

3. *Nutrients*—No increase which would accelerate eutrophication or result in concentrations that may stimulate the growth of aquatic plants, fungi or bacteria, in a manner which has an undue adverse effect on any beneficial values or uses.

4. *Aquatic Habitat*—No change from background conditions which would have an undue adverse effect on the composition of the aquatic biota, the physical or chemical nature of the substrate or the species composition or propagation of fishes.

5. *Sludge deposits or solid refuse*—None

6. *Settleable solids, floating solids, oil, grease, scum, or total suspended solids*—None in such concentrations or combinations which would have an undue adverse effect on any beneficial values or uses.

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Section 3-03. Class B Waters

A. *Management Objectives*

Class B waters shall be managed to achieve and maintain a high level of quality, which is compatible with the following beneficial values and uses:

1. *Values*—Water which is of a quality which consistently exhibits good aesthetic value and provides high quality habitat for aquatic biota, fish and wildlife.

2. *Uses*—Public water supply with filtration and disinfection; irrigation and other agricultural uses; swimming, and recreation.

B. *Water Quality Criteria for Class B Waters*

1. *pH*—Values shall be maintained within the range of 6.5 and 8.0. The change or rate of change in pH either upward or downward resulting from the discharge of wastes shall be controlled so as to prevent any undue adverse effect on aquatic biota, fish or wildlife.

2. *Turbidity*

   a. *Cold Water Fish Habitat*—Not to exceed 10 NTU.

   b. *Warm Water Fish Habitat*—Not to exceed 25 NTU.

3. *Fecal Coliform*—Not to exceed 200 organisms/100 ml except that the Secretary may, by permit condition, waive compliance with the fecal coliform criterion during all or any portion of the period between October 31st and April 1st, provided that a health hazard is not created. The Secretary shall provide written notice to the Vermont Department of Health prior to issuing a permit

waiving compliance with the fecal coliform criterion.

4. *Color*—Not to exceed 25 standard color units.

5. *Taste and Odor*—None in such concentrations that would have an undue adverse effect on beneficial values or uses or on the taste or odor of fish.

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